

19. (Currently Amended): A device for the optical authentication and identification of objects, comprising:

an optical recording device comprising: for illuminating with coherent light a volume-wise at least partially scattering surface of the objects under specified illumination conditions, and for recording the speckle patterns thus obtained for various nominal values of illumination parameters and also in a range of values around those nominal values;

a laser source;

a splitter cube;

a first lens and a second lens having coincident optical axes and positioned on two sides of the splitter cube, such that the laser source is disposed at the object focus of the first lens;

a diaphragm having a plurality of adjustable captures positioned in the outward direction of the beam of the laser source behind the first lens;

an actuator configured to vary the focusing distance of the laser beam on an object; and

~~wherein the recording device is configured to record all of the data corresponding to different situations various in wavelength of the laser source, directions of emission of the laser beam, focusing of the laser beam, position of the laser source, inclination and position of the object with respect to the laser beam;~~

a storage device; and

an optical reading device comprising:

a laser source, which emits illumination beam illuminating the objects; and

an optical device formed on the detector of the reading device; and

an image of the illuminated area of these objects, parameters of these optical devices being modifiable;

wherein the specified illumination conditions including various wavelengths of the laser source, directions of emission of laser beams, focusing of the laser beams, position of the laser source, inclination and position of the object with respect to laser beams.

20. (Previously Presented): The device as claimed in claim 19, wherein the modifiable parameters are at least one of the following parameters: wavelength of the laser source, direction of emission of the laser beam, focusing of the laser beam, position of the laser source, inclination and position of the object with respect to the laser beam.

21. (New): A device for the optical authentication and identification of objects, comprising:

an optical recording device for illuminating with coherent light a volume-wise at least partially scattering surface of the objects under specified illumination conditions, and for recording the speckle patterns thus obtained for various nominal values of illumination parameters and also in a range of values around those nominal values;

a storage device; and

an optical reading device comprising:

a laser source, which emits illumination beam illuminating the objects; and

an optical device formed on the detector of the reading device; and

an image of the illuminated area of these objects, parameters of these optical devices being modifiable;

wherein the specified illumination conditions including various wavelengths of the laser source, directions of emission of laser beams, focusing of the laser beams, position of the laser source, inclination and position of the object with respect to laser beams.